

## Effects of the DoD Drawdown on Small Business



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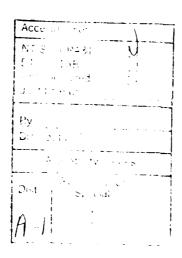
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# Effects of the DoD Drawdown on Small Business

#### Introduction

This paper analyzes how the changing magnitude and composition of Department of Defense (DoD) purchases of goods and services (G&S) will impact small businesses between 1991 and 1997. While defense-related work performed by small businesses will almost certainly decrease as defense budgets are reduced, the degree of that decline is not certain. The issue is whether small businesses are likely to be hurt disproportionately by planned defense spending cuts.

We estimate that defense work obtained by small businesses is likely to decline in constant dollars by 18.7 percent between 1991 and 1997. In comparison, we project that total DoD purchases of G&S from both small and large business will decline by 19.6 percent during the same time frame. Thus, small businesses are likely to lose proportionally less defense-related work than will be lost by large defense contractors because of the substantial decline in the level of DoD spending.

The amount of defense-related work performed by small businesses might be altered in any of four primary ways. First, all defense-related businesses, large and small, will compete for significantly fewer available defense dollars. However, shifts in the composition of DoD purchases might occur that could either hurt or help small businesses. Second, the share of DoD prime contracts awarded to small businesses might be increased or decreased on the basis of DoD policy changes. Third, the percentage of work that is subcontracted might be reduced if prime contractors retain more work "in-house." Fourth, the share of subcontracted work awarded to small businesses may be reduced by prime contractors.

The reduction in total DoD purchases will not be spread uniformly across the many program categories; some industries will be adversely

<sup>&</sup>lt;sup>1</sup>The term "small business" as used here is defined by Federal Acquisition Regulation (FAR) Subpart 19.1. That definition varies according to a business' size depending upon the type of business unit in question.

affected more than others. Each procurement category represents a unique mix of prime- and subcontract awards to large and small businesses. For example, missile and space system defense work is dominated by large businesses; small businesses receive a 10.5 percent share of DoD spending in the missile and space system procurement category. A \$1 million reduction in DoD funding for this category would have a lesser effect on small businesses than would an equivalent reduction in funding for textiles or construction — procurement categories in which over 50 percent of DoD purchases goes to small businesses.

We assume that the proportion of defense work that is subcontracted will not change significantly between 1991 and 1997. This assumption is reasonable because both the capital invested in plant and equipment and the existing production technology are fixed in the short run, limiting the flexibility of prime contractors to create new internal capabilities. Additionally, with declining overall defense business, new investments to expand capacity are risky. We further assume that the share of each program category captured by small businesses through prime awards or subcontracts will not change substantially over the 6-year period investigated. This second set of assumptions is less certain because the amount of defense work awarded to small businesses by DoD or defense prime contractors is considerably more variable in the short run.

### SMALL BUSINESSES' SHARE OF DEFENSE-RELATED WORK

Column 1 of Table 1 reports the estimated value of DoD purchases of G&S in 1991. DoD uses the Defense Economic Impact Modeling System (DEIMS) to estimate the economic impacts of defense-related spending on the U.S. economy. The data that underlie the most recent DEIMS report<sup>2</sup> were sorted into the procurement categories of Table 1 and are stated in constant 1993 dollars.

<sup>&</sup>lt;sup>2</sup>Projected Defense Purchases. Detail by Industry and State: Calendar Years 1991 through 1997. Washington Headquarters Services (WHS), Directorate of Information Operations and Reports (DIOR), Government Printing Office, Washington, D.C., November 1991. Constant 1993 dollar figures are calculated using the latest official DoD Comptroller inflation factors. Contract actions under \$25,000 were estimated at 9 percent of the total.

We estimate that a large portion of defense-related work in 1991 - some \$77.9 billion or 44 percent of the total - was subcontracted. As shown in Column 2, the percentage of defense work that is subcontracted varies by procurement category. For industries that produce military end items (Category 1), we estimated the percentage of subcontracted work by dividing the "cost of materials" by the "value of industry shipments" as reported in the most recent Annual Survey of Manufactures.<sup>3</sup> For the remaining procurement categories and subcategories, we estimated the percentage of subcontracted work by using the ratio of "total intermediate inputs" to "total industry output," (data obtained from the 1987 input-output accounts of the U.S. economy).<sup>4</sup>

The share of DoD prime contract awards obtained by small businesses is shown in column 4.5. Column 5 estimates the percentage of subcontracted defense-related work performed by small businesses. We used the DIOR's subcontracting report to group major prime contractors (those with over \$10 million in defense contracts in the first half of FY92) into the procurement categories of Table 1.6. Using a weighted average (by the dollar value of prime contracts), we estimated the share of subcontracted work that was awarded to small businesses for each of the procurement categories.

Columns 6 through 8 calculate the dollar value of defense-related work performed by small businesses either as a prime contractor or subcontractor. We estimate that small businesses captured an aggregate of \$50.1 billion (28.4 percent) of 1991 DoD outlays for G&S; they performed \$20.3 billion of this work as prime contractors and \$29.8 billion as subcontractors or defense suppliers. Column 9 shows small businesses' share of defense-related purchases for each of the procurement categories.

Columns 10 through 14 of Table 1 show estimates of the effects on small businesses from the projected declines in DoD purchases between

<sup>&</sup>lt;sup>3</sup>U.S. Department of Commerce. Bureau of the Census, 1990 Annual Survey of Manufactures, M90(AS)-1, March 1992.

 $<sup>^4</sup>$ U.S. Department of Commerce, Survey of Current Business, April 1992, pp. 64-71.

 $<sup>^5 \</sup>rm See$  Table 5 of WHS, DIOR, Prime Contract Awards for Fiscal Year 1991 (P03 Report).

<sup>&</sup>lt;sup>6</sup>See Tables III-1 through III-4 of WHS, DIOR, Companies <sup>6</sup>Participating in the Department of Defense Subcontracting Program for First Half Fiscal Year 1992 (P14 Report).

<sup>7</sup>In Column 6, we netted out subcontracted work. Essentially, small businesses that capture prime contracts retain only a portion of the work "in house."

1991 and 1997. Estimated DoD outlays for G&S in 1991 and 1997 are shown in Columns 10 and 11 respectively. The DEIMS estimates that DoD private-sector spending was \$176.6 billion in 1991 and that this total will decline (by 19.6 percent) to \$142.0 billion in 1997.

We multiplied the estimated small business share of each procurement category (Column 9) by the 1991 and 1997 DEIMS projections (Columns 10 and 11) to estimate the dollar value of defense-related work that will be performed by small businesses. Small businesses' defense-related work was \$50.1 billion in 1991 and is projected to fall to \$40.7 billion by 1997, a decline of 18.7 percent. Essentially, small businesses will obtain a somewhat larger share (28.7 percent) of considerably smaller total DoD outlays for G&S in 1997.

Both large and small businesses are expected to bear the burden of reduced DoD spending between 1991 and 1997. However, our analysis suggests that small businesses' defense-related work will decline less in percentage terms than total DoD purchases. Small businesses will obtain less total DoD-generated business but they will increase their share of the shrinking defense budget for the following reasons: Small businesses historically capture a low percentage of defense-related work in industries that produce specialized military end items such as missiles, aircraft, and weapons - DoD spending on those products receives a disproportionately large cut during the period between 1991 and 1997. Conversely, DoD spending on construction declines very little; small businesses perform more than 56 percent of the defenserelated work in this procurement category. Although some individual small businesses will certainly suffer during the period of reduced DoD spending, small businesses as a group are expected to retain 81 percent of their present level of defense-related work.

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